

## **REMARKS**

This paper is in response to the official action of June 28, 2005. Reconsideration is requested.

By the foregoing, claim 1 is amended to omit an extraneous word, claim 3 is amended for clarity as suggested by the examiner, claim 13 is amended for clarity, claim 14 is amended to correct its dependency and for clarity, and claim 17 has been canceled. No new matter has been added.

The issues raised in the official action will be considered in the order appearing in the action.

### **Claim Objections**

The objection to claim 3 is believed to be overcome by the correction of the word “using” to --used-- in line 2 of that claim. An indication to that effect is solicited.

### **Claim Rejections - 35 U.S.C. § 112**

Claim 14 has been amended to depend from claim 13 (rather than from claim 11), thereby addressing the basis for rejections of claim 14 as indefinite. Reconsideration and withdrawal of the indefiniteness rejection of that claim are solicited.

### **Claim Rejections - 35 U.S.C. § 102**

Claim 17 has been rejected as anticipated by Hatano et al. U.S. 6,909,191 B2.

Claim 17 has been canceled, thereby mooting this rejection. Withdrawal of the rejection is solicited.

### **Claim Rejections - 35 U.S.C. § 103**

Claims 7, 11, and 12 have been rejected as obvious over Mitchell et al. U.S. 6,590,137, and claims 7-12 have been rejected as obvious over Mougins U.S. 6,159,457. These rejections are respectfully but strongly traversed.

Independent claim 7, and therefore dependent claims 8-12, recite an organic anti-reflective coating composition comprising a first polymer (of Formula I) and at least a second polymer (selected from one or more of polymers of Formulas III and IV), with the formulas recited in claim 7. As amply disclosed in the application, the combination of a polymer of Formula I with one or more of the polymers of Formulas III and IV provide a composition suitable for use as an organic anti-reflective coating composition, such as for use in immersion lithography.

The examiner has not identified a composition in either of the applied references containing a polymer of Formula I with one or both of a polymer of Formulas III and IV, but instead makes an obviousness rejection based on the alleged disclosure in Mitchell and Mougín of one or more polymers falling within the recited formulae in a multicomponent superabsorbent particle (Mitchell) or in a cosmetic or dermatological composition (Mougín). It is submitted that there is no motivation in the applied references to select a combination of the polymers recited in the claims and therefore that the applied references fail to render claims 7-12 obvious.

Firstly, the applied references are non-analogous as they relate to different fields of endeavor from that of the invention. Even assuming for the sake of argument that Mitchell and Mougín disclose the individual polymers of the invention, nothing in the references discloses the use of the polymers as an anti-reflective coating composition, or even suggests the combinations recited in the claims.

An ideal top anti-reflective coating for use in immersion lithography must satisfy the following requirements: 1) the top anti-reflective coating must be transparent to a light source; 2) the top anti-reflective coating must have a refractive index between 1.4 and 2.0, depending on the kind of an underlying photosensitive film (i.e. photoresist) to be used; 3) when the top anti-reflective coating composition is coated on an underlying photosensitive

film, it must not dissolve the photosensitive film; 4) the top anti-reflective coating must not be soluble in water upon light exposure; 5) the top anti-reflective coating must be soluble in a developing solution; and 6) the top anti-reflective coating must enable the formation of a vertical pattern.

Therefore, it is not a trivial pursuit to find suitable materials for the top anti-reflective coating.

Nothing in the applied references would lead a skilled artisan to select the combination of polymers as recited in claims 7-12. It is submitted that the rejection is based on hindsight reasoning using applicants' own disclosure, which is of course is impermissible.

For the foregoing reasons, it is urged that the obviousness rejection should be withdrawn. Such action is solicited.

#### **Double Patenting**

Claims 1 and 2 have been provisionally rejected for double patenting for obviousness-type double patenting over claims 1, 2, and 7 of copending application Serial No. 10/891,568, and claims 1-17 have been provisionally rejected for obviousness-type double patenting in view of claims 1-14 and 16 of copending application Serial No. 10/903,076.

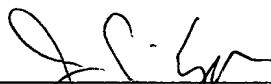
In response, a terminal disclaimer with respect to both copending applications is submitted herewith, with the requisite \$130.00 fee. In view thereof, it is believed the double patenting rejections have been overcome, and an indication to that effect is solicited.

It is noted that claims 1-6 and 13-16 are free of the art, and it is submitted that all claims 1-16 are now in condition for allowance, and such action is solicited.

Should the examiner wish to discuss the foregoing or any matter of form in an effort to advance this application toward allowance, he is urged to telephone the undersigned at the indicated number.

Respectfully submitted,

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By: \_\_\_\_\_

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